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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/610,263	07/05/2000	Satoshi Kume	31671-164489RK	5002
7590	05/20/2004		EXAMINER	
VENABLE P.O. BOX 34385 WASHINGTON, DC 20043-9998			TRAN, LOUIS B	
			ART UNIT	PAPER NUMBER
			3721	

DATE MAILED: 05/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/610,263

Applicant(s)

KUME ET AL.

Examiner

Louis B Tran

Art Unit

3721

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-8 and 15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-8, 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to applicant's amendment, received on 03/16/2004.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 15, 6 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Kreager et al. (4,534,818).

With respect to claim 15, Kreager et al. anticipates an ultrasonic sealing apparatus in which a laminated packaging material containing thermoplastic is formed into a tubular form and the tubular material is transversely ultrasonically sealed by an apparatus comprising of a horn 12 with an elongated and flat sealing face 24 and an opposing jaw 18 as seen in Figure 1 of Kreager et al. The opposing jaw is disclosed as having an elongated pressing face that presses the packaging material in cooperation with the sealing face of the horn and having a center portion and two end portions wherein the center portion is narrower than both end portions as seen in figure as item 28 in Figure 1.

With respect to claim 6, Kreager et al. discloses a narrow center portion 26 having a recess formed along a direction perpendicular to the longitudinal direction of the pressing face as seen in Figure 1.

With respect to claim 7, Kreager et al. discloses a center portion having a recess formed as an arc shape as seen in Figure 1.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2, 3, and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kreager et al. in view of Bosche et al. (4,159,220).

With respect to claim 2, Kreager et al., does not show a laminated packaging material that contains a paper layer; however, Bosche et al. discloses the concept of thermoplastic laminate material containing a paper layer shown in Figure 1 of Bosche et al. for the purposes of moisture proofing and heat and pressure adhesive means described in column 1, line 20, of Bosche et al.

Therefore it would have been obvious for one having ordinary skill in the art to provide Kreager et al. with thermoplastic laminate material containing a paper layer in order to moisture proof a package.

With respect to claim 3, Kreager et al. discloses the invention substantially as claimed including the features discussed above but does not show the transverse ultrasonic sealing is ultrasonic sealing with a fluid, an the ultrasonic horn and the

Art Unit: 3721

opposing jaw press together to seal the tubular laminated packaging material filled with fluid content.

However, Bosche et al. discloses the transverse ultrasonic sealing is ultrasonic sealing with a fluid, an the ultrasonic horn and the opposing jaw press together to seal the tubular laminated packaging material filled with fluid content for the purposes of creating fluid tight seals as discussed in column 1, line 24.

Therefore, it would have been obvious to one having ordinary skill in the art to provide Kreager et al. with various packaging material filled with fluid content in order to provide fluid tight seals.

With respect to claim 4, Kreager et al. discloses the invention substantially as claimed including the features discussed above but does not show a center portion length that is longer than a length of a longitudinally sealed three-ply portion of the tubular packaging material under a pressed state; however, Bosche et al. discloses a center portion length that is longer than a length of a longitudinally sealed three-ply portion of the tubular packaging material under a pressed state for the purposes of accommodating the overlapped layers discussed in column 7, line 45, of Bosche et al.

Therefore, it would have been obvious to one having ordinary skill in the art to provide Kreager et al. with a center portion length that is longer than a length of a three-ply portion in order to accommodate overlapped layers and create an improved seal.

6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kreager et al. in view of Nakanose (3, 962, 508).

Art Unit: 3721

Kreager discloses the invention substantially as claimed above but does not show a resin tape for sealing and creating the tubular form and only discloses the fusing of thermoplastic to form a seal; however, Nakanose discloses the common use of thermoplastic resin tap for packaging purposes in column 1, line 10.

Therefore, it would have been obvious for one having ordinary skill in the art to provide Kreager with thermoplastic resin tape in order to provide a means for sealing a package.

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kreager et al. (4,534,818).

With respect to claim 5, Kreager et al. discloses the claimed invention except for a width of the center portion is $\frac{1}{4}$ to $\frac{1}{2}$ of a width of the pressing face at both end portions.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to find an optimum relation between the center portion and end portions, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Conclusion

8. Applicant's remarks have been fully considered but are deemed non-persuasive. Examiner has Applicant contends that Kreager et al. does not show an elongated pressing face working in "cooperation" with the sealing face of the horn. However,

column 4, line 68- column 5, lines 1-3 clearly describes the horn coming into contact with the opposing sealing jaw 18.

Cooperate is defined as:

co·op·er·ate (ko-òp'e-rât') *verb, intransitive*
co·op·er·at·ed, co·op·er·at·ing, co·op·er·ates

1. To work or act together toward a common end or purpose.¹

Clearly, the opposing jaw 18 *works or acts together toward a common end or purpose* in contacting one another to seal the material.

Examiner previously mislabeled the only existing independent claim 15 as claim 1 in the previous office action. Applicant has correctly responded to the rejection with the arguments set forth. Correction of the typographical error is made with this office action.

Applicant also contends that Bosche does not show a length of a center portion, in a longitudinal direction of the action face of the opposing jaw is at least longer than a length of a longitudinally sealed portion for accommodating layers as in column 7, line 45.

For the reasons above, the grounds of rejection are deemed proper.

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

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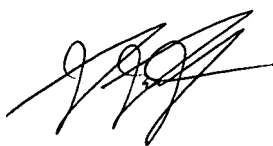
TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Louis B Tran whose telephone number is 703-305-0611. The examiner can normally be reached on 8AM-6PM Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I Rada can be reached on 703-308-2187. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

lbt



SCOTT A. SMITH
PRIMARY EXAMINER